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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,280	01/02/2002	Ian Richard Aldred	13804-002001 / HH/MC/P717	8327
26161	7590	06/15/2004	EXAMINER	
FISH & RICHARDSON PC 225 FRANKLIN ST BOSTON, MA 02110			TANG, SON M	
			ART UNIT	PAPER NUMBER
			2632	

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/039,280

Applicant(s)

ALDRED, IAN RICHARD

Examiner

Son M Tang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the field-distortor does not radiate an electro-magnetic field must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear that the field-distortor responses to the input signal without arranged to radiate an electro-magnetic field.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1-20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakauchi [US 4,382,291] in view of Corman [US 5,630,225].

Regarding to claim 1: Clark et al. discloses a detector device [Fig. 4] comprising, a receiver 70, wherein said receiver including (a filter 96, converter 98) for influencing at least one characteristic of a first input signal and a mixer 100 for combining at least the influenced signal and a second signal from clock 90 to produce a combined signal having a characteristic determined by the input signal, Clark et al. fail to disclose a field-distortor for influencing the first input signal. Corman teaches a RF receiver, which comprises a field-distortor 34, that [cited in Fig. 1-3, col. 2, lines 57-67 and col. 4, lines 34-67]. The field-distortor is one of a known method uses to filter out noise or/and distort signal prior leads into the mixer. Thus, it would have been obvious of one having ordinary skill in the art at the time the invention was made to modify the field-distortor as taught by Corman into the detector of Clark et al., for the benefit of that is relatively simple, easily to install, and can be implementable with any standard mixer, since it is not require directly connect to the mixer.

Regarding to claim 2: Clark et al. and Corman disclose all the limitation as described above, they fail to specify that the field-distortor is operable to change the phase of the first electro-magnetic signal. It is clear that, resonator 16 is for purifying noise input signal and may change the input to DC voltage, therefore, it would have been obvious of one having ordinary skill in the art to recognize that the phase of the first signal is changed after purified by resonator 16.

Regarding to claims 3-4: Clark et al. and Corman disclose all the limitation as described above, they fail to specify that wherein the field-distortor comprises a diode. It is clear

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that, diode comprises a two-terminal semiconductor and, as long as the resonator 16 is being influenced first input signal, employ any known device, such as diode for performing the same function, would not constitute an inventive step, but it an obvious of design choice.

Regarding to claims 5-6: Clark et al. further discloses a transceiver [Fig. 1] includes a signal generator [90] for generating the input signal.

Regarding to claims 7-9: Clark et al. further discloses a transmitter/receiver antenna 16 and the received signal 68 being derived from the transmitted signal 56 and wherein the first signal is derived from a received signal 68, and the first signal 68 is derived from the transmitted signal 56 [see Fig. 4].

Regarding to claim 10: Clark et al. further discloses a second signal is derived from the received signal 68.

Regarding to claim 11: Clark et al. further discloses a second signal is derived from an oscillator 90 for generating the transmit signal 56 [see Fig. 4].

Regarding to claim 12: Clark et al. further disclose a signal analyzer [102,114 and 120] see Fig. 4. col. 12, lines 36-68 to col. 13, lines 1-14] for monitor the characteristic of the combined signal to determine the correct operation of at least one element.

Regarding to claim 13: Clark et al. further disclose that at least one element of the detector device is a receive portion.

Regarding to claim 14: Clark et al. disclose a field-distorter [96,98] that does not radiate an electro-magnetic field in response to the input signal [see Fig. 4].

Regarding to claim 15: Corman further teaches that the field-distorter 16 is arranged to radiate an electro-magnetic field 15 in response to the input signal [see Fig. 1].

Regarding to claims 16-17 and 22: Corman further teaches that the field-distortor 16 is disposed adjacent apart from the conductor 14 [see Fig. 1].

Regarding to claim 18: Clark et al. discloses a motion detector device [Fig. 4] comprising, a receiver 70, wherein said receiver including (a filter 96, converter 98) for influencing at least one characteristic of a first input signal and a mixer 100 for combining at least the influenced signal and a second signal from clock 90 to produce a combined signal having a characteristic determined by the input signal, Clark et al. fail to disclose a field-distortor for influencing the first input signal. Corman teaches a RF receiver, which comprises a field-distortor 34, that [cited in Fig. 1-3, col. 2, lines 57-67 and col. 4, lines 34-67]. The field-distortor is one of a known method uses to filter out noise or/and distort signal prior leads into the mixer. Thus, it would have been obvious of one having ordinary skill in the art at the time the invention was made to modify the field-distortor as taught by Corman into the detector of Clark et al., for the benefit of that is relatively simple, easily to install, and can be implementable with any standard mixer, since it is not require directly connect to the mixer.

Regarding to claims 19-20: Clark et al. discloses a method of operating a detector device [Fig. 4] comprising, a receiver 70, wherein said receiver including (a filter 96, converter 98) for influencing at least one characteristic of a first input signal and a mixer 100 for combining at least the influenced signal and a second signal from clock 90 to produce a combined signal having a characteristic determined by the input signal motion device, Clark et al. fail to disclose a circuit element being disposed adjacent to the conductor for influencing the first input signal. Corman teaches a RF receiver, which comprises a circuit element 16 [cited in Fig. 1-3, col. 2, lines 57-67 and col. 4, lines 34-67]. The circuit element is one of a known

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method uses to filter out noise or/and distort signal prior leads into the mixer. However, Corman does not mention that applying a signal to the circuit element to vary the electromagnetic characteristics of the circuit element. It is clear that, the electromagnetic characteristics can be varied in many method, e.g. varying the distant between element circuit and conductor can be manipulated an electromagnetic characteristics of the circuit element, as taught by Corman. Thus, it would have been obvious of one having ordinary skill in the art at the time the invention was made to modify the element circuit as taught by Corman into the detector of Clark et al., for the benefit of that is relatively simple, easily to install, and can be implementable with any standard mixer, since it is not require directly connect to the mixer.

### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Huang et al. [US 6,023,205], Nakauchi [US 4,382,291] and Monchalin et al. [US 5,131,748].

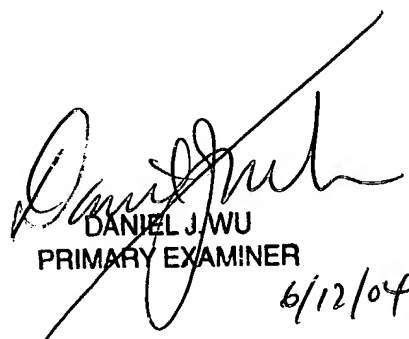
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son M Tang whose telephone number is (703)306-5970. The examiner can normally be reached on 4/9 First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J Wu can be reached on (703)308-6730. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Son Tang

  
DANIEL J. WU  
PRIMARY EXAMINER  
6/12/04